WHAT IS CLAIMED IS:

1. A method of manufacturing a light-conductive pipe comprising the steps of:

a.) forming a light pipe mold having an elongated cavity with two optical end faces and an opening for injecting molten material into the cavity distant from either optical end face;

b.) providing molten material from a supply of molten material;

c.) injecting the molten material through the opening; and

d.) cooling and solidifying the molten material to form a light-conductive pipe having an input optical face and an output optical face connected by an elongated body of light-conductive material.

2. The method of claim 1 further including the step of breaking off excess solidified material formed at the point where the opening joins the cavity from the elongated body.

3. The method of claim 2 wherein the light pipe mold cavity further includes cavity contours that form at least one integral light pipe alignment feature projecting from the elongated body of the light pipe, and the opening for injecting molten material into the cavity is located in the alignment feature cavity contour.

4. The method of claim 3 wherein the alignment feature is formed with a depression at the point where the opening joins the cavity to prevent defects from interfering with the alignment feature.

5. The method of claim 3 wherein the light pipe mold includes multiple elongated cavities, each having two optical end faces, and openings for injecting molten material into the cavities distant from either optical end face, and the light pipe mold forms an array of light pipes connected by alignment features.

6. The method of claim 5 wherein the alignment features are formed with a depression at the point where the opening joins the cavity to prevent defects from interfering with the alignment features.

7. The method of claim 1 wherein the light pipe mold cavity further includes cavity contours that form at least one integral light pipe alignment feature.

8. The method of claim 7 wherein the light pipe mold includes multiple elongated cavities, each having two optical end faces, and openings for injecting molten material into the cavities distant from either optical end face, and the light pipe mold forms an array of light pipes connected by alignment features.

9. The method of claim 8 wherein the light-pipe mold has a plurality of openings at a common location on each light pipe for injecting molten material from the supply.

10. The method of claim 8 wherein the array of light-pipes are arranged in a single row.

11. The method of claim 1 wherein the elongated cavity comprises an optically polished surface.

12. The method of claim 1 wherein the molten material is plastic.

13. The method of claim 12 wherein the plastic comprises one or more of the group including polycarbonates, acrylics, fluoropolymers, cyclic olefins, polysulfones, polyethersulfones, and polyetherimides.

14. The method of claim 12, wherein the molten material comprises an optical nanocomposite derivative of a plastic that has been modified with inorganic material.

15. An injection molded light-pipe comprising an input optical face and an output optical face connected by an elongated body of light-conductive material formed by the method of claim 1.

16. The light-conductive pipe of claim 15, wherein the light-conductive pipe is made of plastic.

17. The light-conductive pipe of claim 16 wherein the plastic comprises one or more of the group including polycarbonates, acrylics, fluoropolymers, cyclic olefins, polysulfones, polyethersulfones, and polyetherimides.

18. The light-conductive pipe of claim 15, wherein the light-conductive pipe is made of an optical nanocomposite derivative of a plastic that has been modified with inorganic material.

19. The light-conductive pipe of claim 18, wherein the light conductive pipe is made of optical nanocomposite derivative of a transparent plastic that have been modified with inorganic materials to increase refractive index or lower chromatic dispersion.

20. An integrated linear array of injection molded light-conductive pipes, each pipe comprising an input optical face and an output optical face connected by an elongated body of light-conductive material, where the pipes in the linear array are connected by alignment features and are formed by the method of claim 8.

21. An optical faceplate comprising multiple stacked integrated linear arrays of injection molded light-conductive pipes according to claim 20.

22. A tiled flat-panel display system comprising a plurality of modules aligned in an array, each module comprising a flat-panel display having a plurality of pixels and an optical faceplate according to claim 21.